**NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PER. \_\_\_\_**

**BIO-COM - ECOLOGY –**

**ENERGY TRANSFER, NEEDS, RELATIONSHIPS & CYCLES OF MATTER – STUDY GUIDE**

1. When an organism’s life processes slows down during times when there is little food, this is called \_\_\_\_\_\_\_\_\_\_\_.

2. The most important need of an organism is \_\_\_\_\_.

3. The area claimed by an animal or group of animals as their living space is its \_\_\_\_.

4. The role an organisms plays in its environment is its \_\_\_\_\_.

5. Identify 4 carnivores?

6. Raccoons will eat almost anything. They are most accurately called \_\_\_.

7. Condors are related to vultures and feed on carrion, or dead animals. Condors’ role in

the food web is as \_\_\_\_

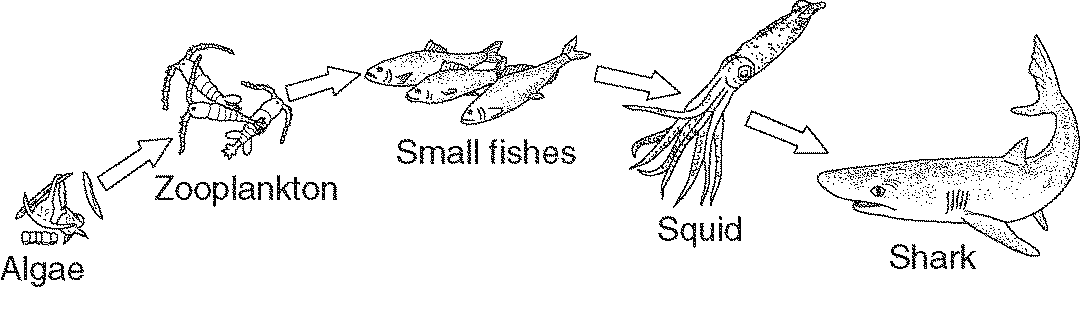
8. \_\_\_\_ are the different feeding levels in an ecosystem.

9. \_\_\_\_ is the process where green plants convert sunlight into food energy.

10. Evaporation of water from plants is called \_\_\_\_\_.

11. A bird stalks, kills, and then eats an insect. Based on its behavior, which ecological terms describe the bird?

12. The algae at the beginning of the food chain in Figure 3-1 are \_\_\_\_.

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13. All the interconnected feeding relationships in an ecosystem make up a food \_\_\_.

14. Organisms that obtain nutrients by breaking down dead and decaying plants and animals are called \_\_\_.

15. The repeated movement of water between Earth’s surface and the atmosphere is called\_\_\_\_.

16. Identify 3 ways in which carbon cycles through the biosphere.

17. Nitrogen fixation is carried out primarily by \_\_\_.

18. Organisms need nutrients in order to \_\_\_\_.

19. What organisms have a direct role in the nitrogen cycle?

20. What activities would part of a biogeochemical cycle?

21. \_\_\_\_\_ populations control prey populations.

22. Where does a parasite live?

23. An example of \_\_\_\_\_\_\_\_\_\_ is a whale & barnacles.

24. An example of \_\_\_ is a tick & dog.

25. An example of a \_\_\_\_ is a hare.

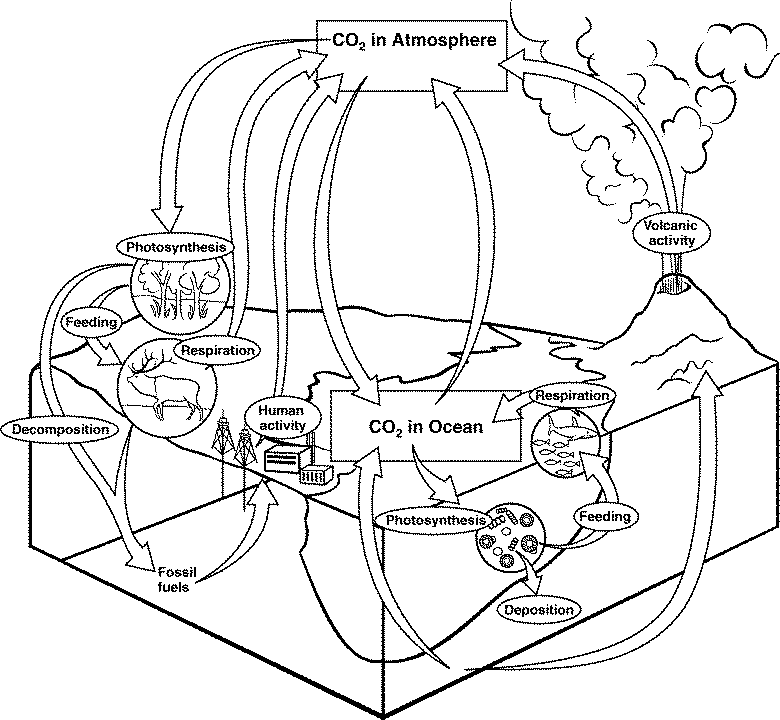
26. An organism which actively hunts and consumes other organisms is a \_\_\_\_.

27. An organism which is consumed by another organism is a \_\_\_\_.

28. A relationship in which one organism benefits and the other organism is harmed is \_\_\_.

29. A relationship in which one organism benefits and the other organism is neither harmed nor benefited is \_\_\_\_.

30. A relationship in which both organisms benefit is \_\_\_\_.

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**D.**

**E.**

**F.**

**G,.**

**C.**

**B.**

**A.**

**H.**

31. Which steps in the figure above shows the removal of CO2 from the atmosphere.

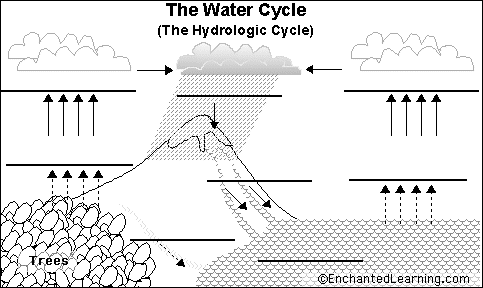
32. Which steps in the figure above shows the addition of CO2 to the atmosphere?

33. Which step in the figure above shows the process where green plants use sunlight to make carbohydrates and oxygen?

34. Which step in the figure above shows the process where by animals use oxygen and carbohydrates to make carbon dioxide and water?

35. Which step above shows a biogeochemical process?

**Label the diagram below**

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**50.**

**53.**

**51.**

**52.**

**54.**

**49.**

**47.**

**48.**

36. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 40. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

37. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 41. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

38. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 24. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

39. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 43. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_